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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,281	11/03/2003	John D. Hill	INY119	1612

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EXAMINER

LUM VANNUCCI, LEE SIN YEE

ART UNIT	PAPER NUMBER
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3611

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/698,281

Applicant(s)

HILL, JOHN D.

Examiner

Lee Lum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-20 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

1. The drawings are objected to because in fig 4, the lead lines for element 40 that point to the element towards the center of the invention should be deleted for clarity. That is, the lead lines immediately adjacent to the labels "40" are sufficient, and it is suggested that those lines leading to the opposite sides of the element be deleted because they appear to form some other element, and so are misleading.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 4, 8, 9, 11, 15, 18 and 19** are rejected under 35 U.S.C. 102(b) as being anticipated by Purcell et al 3774708.

Purcell discloses a track-drive undercarriage in fig 8 attached to a chassis (inherent) of a heavy construction vehicle/tractor, and connected to transmission (inherent) and drive shafts (unidentified in fig 8; adjacent base plate 56), the undercarriage comprising, on each side of the vehicle,

Support brace 54 with base plate 56,

Pair of shock absorbers 53 attached to the base plate,

Pair of axles (inherent), including spindles 24', attached to the shock absorbers (via unidentified links),

Proximate end of each axle attached to one shock absorber,

Torque bar 26' attached to the axles (via links 23'),

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The bar comprising a compression shock system including housing (inherent) and spring 25'/26',

Drive wheels (large uppermost wheels) attached to the drive shafts.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. **Claims 10 and 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell alone.

Purcell does not disclose the vehicle as other types, such as a bulldozer, backhoe or military tank, but this specificity is immaterial. It is clear that the undercarriage may be employed in any type of vehicle that would benefit from a tractive drive system that includes the recited components.

B. **Claims 2, 3, 5, 6 and 16-20** rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell in view of Satzler 4560018.

Re Claims 2 and 16, Purcell does not specify a wheel bearing attached to each spindle, while Satzler shows these elements 60/62 in fig 3. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this feature, as shown in Satzler, to facilitate rotation of the relevant components, as is extremely well-known in the art.

Re Claims 3 and 17, Purcell does not disclose a cogwheel mounted on each bearing, while Satzler shows this wheel 36/42 in figs 2/3. Although Purcell's single-cogwheel configuration is functionally equivalent, it would have been obvious to one with ordinary skill in the art at the time the invention was made to include this alternate embodiment, as shown in

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Satzler, to provide increased control of the endless belt via two toothed wheels instead of one such wheel.

Re Claims 5 and 18, Purcell discloses drive wheels (large uppermost wheels) connected with the drive shafts (unidentified), as previously discussed.

Re Claims 6 and 19, Purcell (and Satzler) shows an endless belt (unidentified in fig 8, and in Satzler, element 16 in fig 2). It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this element, as shown in Purcell (or Satzler), to provide increased traction with certain types of terrain, as is extremely well-known in the art.

Re Claim 20, the references disclose a method using a kit for attaching a track drive undercarriage, the steps derived from the structure and means provided above.

4. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art does not disclose the invention described above also comprising a shock absorber that includes a U-brace, a pair of horizontal springs and a vertical spring.

5. The prior art made of record, and not relied upon, is considered pertinent to the disclosure: Lykken et al 6318484, Kautsch 6182777, Muro et al 6132133, Matsumoto et al 5975226, Purcell et al 4874052, Stedman 4230199.

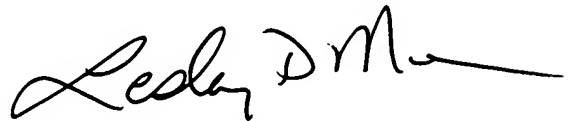
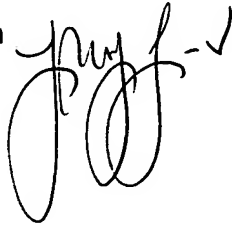
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6. Communication with USPTO/Examiner

Any inquiry concerning this communication, or others, should be directed to Ms. Lum at 703 305-0232, M-F, 9-6. If attempts to reach the examiner are unsuccessful, her supervisor, Ms. Lesley Morris is at 703 308-0629. Our fax number is 703 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications: private PAIR only, for published applications: private or public PAIR. For more information re PAIR: <http://pair-direct.uspto.gov>. Questions re private PAIR: contact the Electronic Business Center (EBC) at 866 217-9197.

Ms. Lee S. Lum  
Examiner  
9/17/04



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